

Abstract Submitted
for the OSF12 Meeting of
The American Physical Society

Numerical simulations of the particle image velocimetry technique applied to dusty plasmas¹ ANYA WEAVER, JEREMIAH WILLIAMS, Wittenberg University — A dusty plasma is a system composed of ions, electrons, neutral particles, and charged microparticles. The dust component in this cloud of ionized gas consists of micron- to nanometer-sized dust grains, which allows for the study of physics on the kinetic level. Recent developments in stereoscopic and tomographic particle image velocimetry (stereo-PIV) techniques have been used to map the underlying distribution functions of the microparticles. This poster describes the numerical study of the PIV measurement technique and its application to the measured three-dimensional velocity space distribution function.

¹This work is supported by grant number PHY-0953595 from the National Science Foundation.

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Date submitted: 04 Sep 2012

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